

When the above-mentioned species (with the exception of *Anaphothrips*) are examined one is impressed by the fact that they all have tarsal or tibial hooks, or projections on the head or antennæ. This is also true of *Merothrips* species concerning which no life history data are available.

From these observations, incomplete as they are, it would appear that the Terebrantia (or at least certain known species which spin a cocoon or form an earthen cell) have developed (or retained) hooks or other anterior projections. These projections doubtless are used in aiding the adult to emerge and are not to be confused with the raptorial function. Also, a generalization which appears to be indicated by these facts is that the cocoon-spinning capacity is a characteristic of the æolothripids and has been retained by certain thripoid representatives which have one generation annually. As further biological data is obtained on additional species and new forms are described, the relationship of the higher groups of the Terebrantia may become more evident.

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NOTES ON SOME CICINDELIDÆ

(Coleoptera)

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Since the appearance of the description of *Cicindela willistoni* subsp. *amargosæ* Dahl¹, several specimens of this form have been collected far from the type locality. It seems desirable at this time to record this increase in range as well as to sepa-

¹Dahl, R. G., 1939, Bull. Brook. Ent. Soc., 34 : 221-222.

rate the subspecies from another distantly related form which, however, may be confused with it.

Two specimens in the M. A. Cazier collection were collected by Ira La Rivers at Reno, Nevada, in October, 1939. This is approximately 275 miles from the type locality. On May 29, 1939, P. C. Ting, M. A. Cazier, J. A. Downes and T. Aitken, collected eighteen specimens of *amargosæ* on saline flats at Gerlach, Washoe County, Nevada. And, on May 30, 1939, the same collectors collected five specimens at Cedarville, Modoc County, California. This increases the distance from the type locality, at Furnace Creek, Death Valley, California, to approximately 400 miles; the distance being measured directly between the two points. This known distribution places it as a likely representative of the Great Basin group, as outlined by M. A. Cazier² in his review of the *willistoni*, *fulgida*, *parowana*, and *senilis* groups.

The specimens from Gerlach, Nevada, vary slightly from those in the type series in that they are more cupreus. One dark blue-green specimen tends to grade into specimens from Cedarville, California, which are dark purple and coal black. The specimens from Reno, Nevada, are entirely coal black, except for white apical elytral spot.

The appearance of the black form at once suggests *Cicindela plutonica* Csy. However, *amargosæ* is readily separable from it by the following characters.

In *amargosæ* the labrum is faintly toothed and in all examples available is white. The maxillary palpi vary from glabrous to very sparsely pilose. The black form is sericeous black. The apical spot is wide and always present. The middle transverse band is never present. There is a distinct subsutural row of foveæ turning outward apically and joining with a row of distinct marginal foveæ.

In *plutonica* the labrum is distinctly toothed, and in a majority of the examples studied is black. The first joint of the maxillary palpi is densely pilose, the rest sparsely pilose. The elytra are dull black, with the apical spot thin or almost lacking. The middle transverse band is distinct or indistinct, but always present. There is a faint subsutural row of foveæ, but no marginal foveæ.

²Cazier, 1936, Bull. So. Calif. Acad. Sci., 35: 156-163.